

NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

LAND SMOOTHING

(acre)
CODE 466

DEFINITION

Removing irregularities on the land surface by use of special equipment.

PURPOSE

1. Improve surface drainage.
2. Provide for more effective use of precipitation.
3. Obtain uniform planting depths.
4. Provide for more uniform cultivation.
5. Improve equipment operation and efficiency.
6. Improve terrace alignment.
7. Facilitate contour cultivation.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on areas where depressions, mounds, old terraces, turn rows, and other surface irregularities interfere with the application of needed soil and water conservation and management practices.

It is limited to areas having adequate soil depths or where topsoil can be salvaged and replaced.

Scope

This practice applies to operations classified as rough grading. Ordinarily, this does not require a complete grid survey. It does not apply to the "floating" done as a regular maintenance practice on irrigated land or the

"planning" done as the final step in applying the practices **Precision Land Forming** (Code 462) or **Irrigation Land Leveling** (Code 464).

CRITERIA

The extent of rough grading required and tolerances of the finished smoothing job shall be in keeping with the requirements of the planned cropping system.

PLANNING CONSIDERATIONS FOR WATER QUANTITY AND QUALITY

Water Quantity

1. Effects on the water budget, especially on volumes and rates of runoff, infiltration and evaporation.
2. Potential for changes in plant growth and transpiration because of changes in the volume of soil water.

Water Quality

1. Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff.
2. Effects on the use and management of nutrients and pesticides.
3. Effects on downstream water quality.
4. Potential for earth moving to uncover or redistribute toxic materials, such as saline soils.
5. Effect on the visual quality of downstream water resources.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

CONSTRUCTION PLANS

Plans for the land smoothing shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Plans should show the extent of the area to be smoothed and an estimate of the quantity of materials to be moved.